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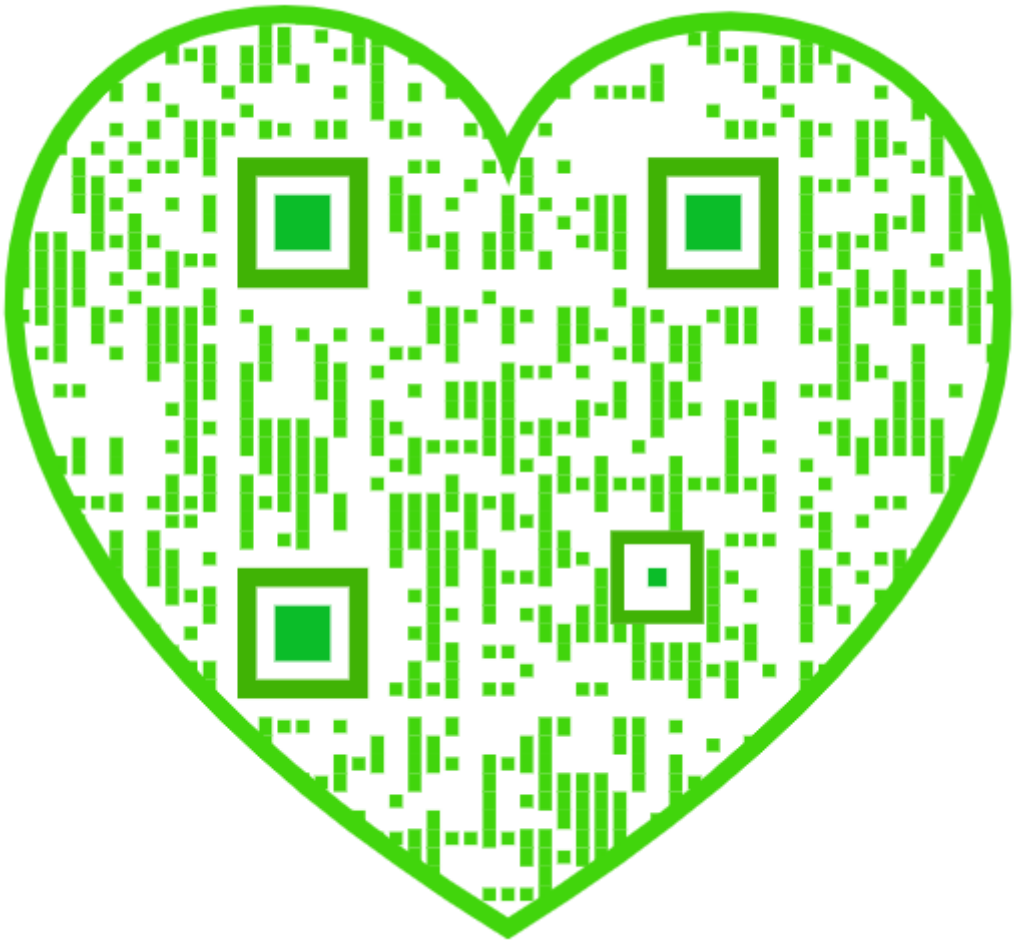
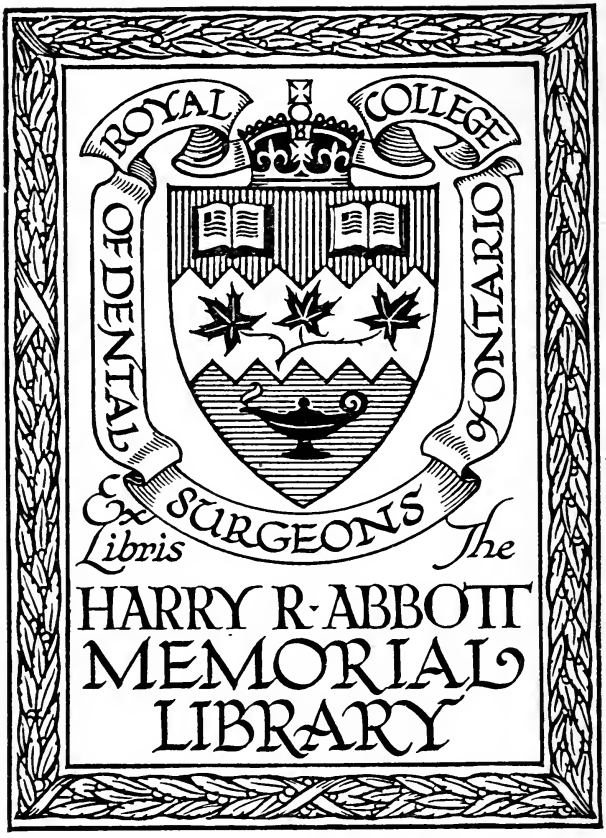
DENTISTRY IN THE BIBLE AND TALMUD

SAMUEL GREIF

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DENTISTRY
IN THE
BIBLE AND TALMUD

A Valuable Contribution to the Early History of Dentistry

BY

DR. SAMUEL GREIF

AUTHOR OF "WHO'S WHO IN DENTISTRY"

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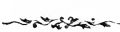
PREFACE

The Talmud is a big voluminous work written in the Chaldaic language about two thousand years ago. It is the great Jewish encyclopedic work of knowledge, comprising the Jewish learnings and literature between about 200 B. C. E. and 300 C. E. It is the great reference book, employed for two thousand years, always rendering abundant material of both interest and value for topics of every description.

The contributions of the Talmud to the history of dentistry are entirely new to the English reading public. They have found no mention in any of our historical works heretofore published. The author wishes to present this treatise as an interesting and complete account of Dentistry in the Bible and Talmud.



DENTISTRY IN THE BIBLE

The "tooth" is mentioned in numerous passages in the Bible. Upon a great number of these are based the comments of the Talmud. A *complete* Biblical registry is here presented:

And Esau ran to meet him, and embraced him, and fell on his neck, and kissed him; and they wept. (Midrash Rabbah and Targum Yonah explain Esau's weeping to have been due to loose and painful teeth).—GEN. xxxiii, 4.

His eyes shall be red from wine, and his teeth white from milk.—Gen. xlix. 12.

Eye for eye, tooth for tooth (שן תחת שן), hand for hand, foot for foot.—Ex. xxi. 24.

And if he strike out his man-servant's tooth, or his maid-servant's tooth, he shall let him go free for the sake of his tooth.—Ex. xxi. 27.

Breach for breach, eye for eye, tooth for tooth; in the manner as he hath caused a bodily defect in a man, so shall it be done to him.—Lev. xxiv. 20.

The flesh was yet between their teeth, it was not yet chewed.—Num. xi. 33.

And the eye shall have no pity; but life (shall go) for life, eye for eye, tooth for tooth (שן בשן), hand for hand, foot for foot.—Deut. xix. 21.

No man shall take the mill or upper millstone to pledge; for he taketh a man's life to pledge. (The millstones are explained by Philo Judeus as having reference to the molar teeth or grinders. See: Kiddushin, 24a-b).—Deut. xxiv, 6.

Also the tooth of beasts will I let loose against them.—Deut. xxxii. 24.

With a fork with three teeth in his hand.—I Sam. ii. 13.

Behold, I have rendered thee a threshing instrument, sharp, new, having many teeth (בעל פיפיות),—Isa. xli. 15.

In those days shall they not say any more, the fathers have eaten sour grapes, and the children's teeth are set on edge; but every one shall die for his iniquity; every man that eateth the sour grapes—his teeth shall be set on edge.—Jer. xxxi. 28-9.

And the word of the Lord came unto me, saying, What mean ye, that ye use this proverb in the country of Israel, saying, The Fathers have eaten sour grapes and the teeth of the children are set on edge? As I live, saith the Lord Eternal, ye shall not have any more to use this proverb in Israel. Behold, all the souls are mine; as the soul of the father, so also the soul of the son—mine are they; the soul which sinneth that alone shall die.—Eze. xviii. 1-4.

Its teeth are the teeth of a lion, and it hath the cutting-teeth (מתלעות) of the lioness.—Joel i. 6.

But I also had indeed given you cleanness of teeth in all your cities, and want of bread in all your places; and yet ye have not returned unto me, saith the Lord—Am. iv. 6.

(Ye) that lie upon beds of ivory (מטות שן) —Am. vi. 4.

Thus hath said the Lord concerning the prophets that mislead my people, who, when they have something to bite with their teeth, cry, Peace; but who prepare war against him who putteth nothing in their mouth.—Mic. iii. 5.

And I will remove their bloody (sacrifices) out of their mouth, and their abominations from between their teeth.—Zec. ix. 7.

Arise, O Lord, help me, O my God; for Thou smitest all my enemies upon the cheek bone; the teeth of the wicked dost Thou break. —Ps. iii. 8.

With hypocritical babbling mockers, they gnashed upon me with their teeth.—Ps. xxxv. 16.

The wicked pursueth evil against the just, and gnasheth against him with his teeth.—Ps. xxxvii. 12.

Sons of men whose teeth are spears and arrows, and whose tongue is a sharpened sword.—Ps. lvii. 5.

O God, break out their teeth in the mouth; the jaw teeth (מלתעות) of the young lions tear thou out, O Lord.—Ps. lviii. 7.

The wicked shall see it and be vexed; he will gnash with his teeth and melt away.— Ps. cxii. 10.

Blessed be the Lord, who hath not given us up as a prey to their teeth.—Ps. cxxiv. 6.

As vinegar is to the teeth, and as smoke is to the eyes: so is the sluggard to those that send him.—Prov. x. 26.

Like a carious tooth (שן רעה) and a foot out of joint, so is confidence in a treacherous man in a time of distress.—Prov. xxv. 19.

There is a generation, whose teeth are as swords, and whose cutting-teeth are as knives, to devour the poor from off the earth, and the needy from among men.—Prov. xxx. 14.

And the teeth of the young lions are broken.—Job iv. 10.

Whatever it may cost, I will put my flesh in my teeth, and my life will I put in my hand. —Job xiii. 14.

He gnasheth over me with his teeth.—Job xvi. 9.

To my skin and to my flesh my bones do cleave, and I must sustain myself with the gums of my teeth (בעור שני) —Job xix. 20.

And I broke the cutting-teeth (מתלעות) of the wrong-doer, and out of his teeth I cast down his prey.—Job xxix. 17.

Who hath ever laid open the front of his garment? or who can penetrate into his double row of teeth (רסנו)?—Job xli. 5.

Thy teeth are like a flock of well-selected sheep, which are come up from washing, all of which bear twins (מתאימות), and there is not one among them that is deprived of her young.—Cant. iv. 2.

His body is like an image made of ivory (שן)overlaid with sapphires.—Cant. v. 14.

Thy teeth are like a flock of ewes, which are come up from the washing, all of which bear twins, and there is not one among them that is deprived of her young.—Cant. vi. 6.

All thy enemies open wide their mouth against thee; they hiss and gnash their teeth. —La. ii. 16.

He hath also broken my teeth with gravel-stones.—La. iii. 16.

On the day when the watchmen of the house will tremble, and the men of might will bend themselves, and the grinders (הטחנות) stand still, because they are become few.—Ecc. xii. 3.

And three ribs were in its mouth between its teeth.—Da. vii. 5.

And it hath great iron teeth.—Da. vii. 7.

Then I desired what is certain concerning the fourth beast, which was different from all these others, exceedingly dreadful, whose teeth were of iron and whose nails of copper.—Da. vii. 19.

DENTISTRY IN THE TALMUD

BERACHOTH, 40a.—Whoever has eaten a meal without having eaten salt therewith, whoever has drunk a beverage without having drunk water thereafter, will be worried during the day by the fetid odor from the mouth, and during the night by the quinsy.

R. Mari said in the name of R. Jochanan: "Whoever was accustomed to eat lentils once every thirty days, kept quinsy away from his home; every day, however, (if one should eat) he would not." For what reason? because of the fetid odor from the mouth.

> Note.—The question of oral hygiene, as well as hygiene in general, seems to have been a prevalent one with the Talmud. As a matter of fact the science which has recently become so prominent has had its principles masterfully laid down by the great Jewish instructor, Moses. The numerous references to hygiene in the Talmud are naturally the result of emphasis laid upon this science of health preservation in the Bible.

BER. 44b.—The Rabanan have learned: The spleen is good for the teeth but bad for the entrails; bran is bad for the teeth but good for the entrails. The Master said: "The

spleen is good for the teeth but bad for the entrails. What remedy is there? It is chewed and thrown away (being injurious to the digestive apparatus). Bran is bad for the teeth but good for the entrails. What remedy is there? It is cooked well and swallowed (being injurious to the teeth)." (See SABB. 110a).

R. Yitzchak said: "Those who eat cabbage before the fourth hour must not be spoken to." For what reason? because of the odor from the mouth. Said R. Yitzchak: "It is forbidden for every man to eat cabbage before the fourth hour."

Note.—Rashi says: "Not being the usual time for a meal, the odor will be offensive to those who may talk with him, his stomach being otherwise empty at the time." Evidently the hygiene taught by the Talmud is of a twofold nature. It is 1) **preventive, warning** against the use of bran which is injurious to the teeth, and even prohibiting the use of cabbage because of the offensive odor; and 2) **curative,** advising the use of milt for the teeth to keep them in perfect condition. As a means also for disguising the offensive breath the Talmud advises the use of various aromatic substances. (See **Sabb.** 62a, 65a, 99a; **Baba Metz.** 113b.)

BER. 54b.—"The stone that Og, King of Bashan, wanted to throw upon Israel." The explanation is this. He spoke: "How large is the camp of Israel?"—"Three *parasans*." "I will go then and tear out a mountain of three *parasans* and throw it upon them and kill them." He went and tore out a mountain of three *parasans* and carried it on his head. But the Holy One, blessed be He, caused the ants to eat it through, so that it fell upon his neck. As he wanted to throw it off, *his teeth bent themselves upon one side and upon the other,* and he could not throw it off. And therefore it is written (Psalms iii, 8), "The teeth of the wicked dost thou break." This is according to R. Simeon ben Lakish: for R. Simeon b. Lakish said: "What is meant by that phrase, 'The teeth of the wicked dost thou break'?—do not read 'break' (*shibarta*) but 'distend' (*shirbabta*)."

Note.—Og, king of Bashan, has won his fame as a man of gigantic height. We do not know how tall he was, but he has been made the standard of measure for anything unusually big. "He is as big as **Og melech ha-Bashan,**" is an idiom most common in the Yiddish language. Og melech ha-Bashan was

the "leviathan" of man. His biblical description is as follows: "For only Og, king of Bashan, had been left of the remnant of the Raphaim; behold, his bedstead was a bedstead of iron; lo! it is in Rabbah of the children of Ammon: nine cubits is its length, and four cubits its breadth, after the arm of a man." (Deut iii, 11). The agadic tale in the Talmud of his abnormal teeth is well in conformity with his description in the Bible.

BER. 56a.—Said he: "I have seen my anterior and posterior teeth falling out." Said the other: "Your sons and daughters will die."

Note.—This is an odd interpretation of a dream. The Talmudic words for "anterior and posterior teeth" are כבי ושיני. The singular of each is כבא and שן. The latter is commonly the word signifying tooth. Both are used in the Talmud interchangeably for one another. The word כבא (kakko), however, has received the special signification of "molar-tooth" including the pre-molar or "bicuspid." Hence kakka usually stands for the posterior teeth and shen for the anterior teeth. Rashi here defines kakke as the "lateral teeth called (in French) mechalieres." Frequently the word kakka and shen stand together as in the above instance (kakke v'shine). They

then seem to have the collective meaning of "denture" rather than anterior and posterior teeth. (See Sabb. 63b; Ab. z. 28a; Chull. 59b.)

I have arranged the following "Nomenclature": שן *(before Maq. שֶׁן- with Suf. שִׁנּוֹ dual שִׁנַּיִם) a tooth of man or animal (Ex. xxi 24); ivory, hence קַרְנוֹת שֵׁן horns of a tooth, i. e., elephant's tusks (Am. vi. 4; Cant. v. 14; Ez. xxvii. 15.). Chald. שֵׁן with Suf. שִׁנָּהּ dual שִׁנַּיִן with Suf. שִׁנַּיָּה (Dan. vii. 5, 7, 19). Also כְּבָא with Suf כְּבוֹ Pl. כְּבֵי . (See also פִּימִיּוֹת Isa. xli. 15).

הַחִיצוֹנוֹת central incisors (Bech. 39a).

הַצְּנִימִיּוֹת lateral incisors (Bech. 39a.).

מִתְלָעָה (מִתְלָעָה) cuspid, canine, cheek or jaw-tooth. (Contraction from יָלַע to devour). Pl. מִתְלָעוֹת. Also מִלְתָּעָה Pl. מִלְתָּעוֹת (Joel i. 6; Job xxix. 17; Ps. viii.).

נִיבָא (Chald.) cuspid, canine. With Suf. נִיבֵי Pl. נִיבֵי (Sabb. 63b).

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*The twenty-first letter of the Hebrew alphabet is known as shin שׁ which is analogous to shen and has the shape of a three-rooted tooth. The names for the characters were chosen with reference to near-by things, such as parts of the body and other objects of the daily life peculiar to the Bedouins, the name of each of which began with the very sound the letter indicated. In a few cases the names seem to have been derived from the form which the sign represented.

מתאימות bicuspids, twin-teeth; also molars. (Cant. iv. 2).

כוכא molar. With Suf. כוכו Pl. כוכי Also טחנות the grinedrs, i. e., molar teeth. (Ecc. xii. 3; Sabb. 152a).

רסן denture, double row of teeth. (Job xli. 5).

עור שנים gums of the teeth. Also שבין השנים (Keth. 60a). and מקום מושב השנים (Rashi, Ab. Z. 28a).

שן דחלב milk-tooth, deciduous or temporary tooth (Kidd. 24b).

חניכי (חניכיים) jaws. (Keth. 39b).

קרנות שן (horns of a tooth) cusps of a tooth.

מכתש socket of a tooth, alveolus (so-called for its shape: a mortar). (Judg. xv. 9).

חך palate, roof of the mouth. (Job xii. 2; Prov. xiii. 7.)

SABBATH 41a.—After eating, if one does not go four ells, the food is not digested, and this is the beginning of a bad odor.

Note.—Unfortunately R. Samuel, who knew a remedy to all sicknesses, could find no remedy to "one who takes his meal and immediately goes to sleep without walking four ells." (See: Baba Metz. 113b).

SABB. 62a.—R. Eliezer permitted to carry cachou boxes, because, he said, "Who general-

ly carries cachou boxes? Women whose breaths emit a bad odor, and surely they will not take them off to show them; hence there is no apprehension that they will carry them four ells or more on public ground.

Note.—It appears from this that the carrying of things farther than four ells on public ground on the Sabbath, is prohibited only when the act is done openly or befressiah, and that otherwise it is permitted.

SABB. 63b.—Once a woman went into a certain house to bake, and a dog, through barking at her, caused her to have a miscarriage. Said the landlord of the house: "Fear him not, I have deprived him of his teeth and claws." But the woman answered: "Throw thy favors to the dogs, the child is already gone!"

Note.—The above agada has been brought to illustrate the saying, "Whoso raises a vicious dog in his house prevents charity to go therefrom." The word "teeth" is here rendered as nibe (see "nomenclature" to Ber. 56a), and is applied to the teeth of animals only. They are the four canine teeth prominent in the dog.

Sudden dread can not only cause pregnant women to miscarry, but may even cause the

teeth of one to fall out. A case like this is narrated in Chullin 59a. The Midrash records a case where the hair have fallen out during a similar experience. Surely we are aware of hair "standing up" during an exciting moment.*

SABB. 64b.—(*Mishna.*) A woman may go out with a grain of pepper or of salt, or with whatever she may be accustomed to keep in her mouth, provided she does not put it in her mouth on the Sabbath to commence with; if it fell out of her mouth she must not replace it. As for a metal or a golden tooth, Rabbi permits a woman to go out with it, but the sages prohibit it.

(*Gemara.* SABB. 65a.) "With a grain of pepper or a grain of salt." The former to take away any bad odor of the breath and the latter as a remedy for toothache.—"Or with whatever she is accustomed to keep in her mouth," meaning ginger or cinnamon.—"A metal or a golden tooth." Rabbi permits and the sages prohibit it. Said R. Zera: "The difference of opinion only concerns a golden tooth, for a silver tooth is unanimously per-

*"The hair of my body stood up." (Job iv. 15).

mitted." This is also proven by the following boraitha: A silver tooth is permitted by all, while as to a golden one Rabbi permits it; the sages, however, prohibit it.

Note.—Rashi says: The sages prohibit the tooth of gold, as it is different in appearance from all the rest of the teeth, while the silver tooth resembles the rest of the teeth and is unanimously permitted by all. The latter is also less valuable than the golden tooth, and there is no apprehension that the woman will remove it from the mouth to show it to her friends.

A grain of salt as a remedy for toothache. We must not expect the therapeutics of the Talmud to be of a rational character. Oftentimes it is neither rational nor empirical. The medicine of the Talmud is a folk-medicine, and is seldom based upon a correct understanding of the pathology of the case under treatment, or upon a knowledge of the physiologic action of the drug employed. The toothache here referred to is rendered by the word דורשיני (dorshine). Rashi defines it as "aching teeth." Etymologists, however, differ considerably as to its exact meaning. Aruch and Aruch Completum take it as the "row of the teeth," or the process of bone containing the teeth, hence to apply the remedy to the gums or alveolar process of the teeth. The Persian

darad signifies "pain"—to apply to the point where the pain is felt. Doro also has the meaning "worm," and this appears to be the most satisfactory explanation of all. Ever since ancient times, all through the middle ages, till the present day, there existed the common and widespread belief that toothache was due solely to the boring action of some worm. The Romans have even gone to the extent of actually applying a worm to the aching tooth, in order to hasten the loss of it. The Chinese similarly attribute the decay of teeth to the action of worms. The remedies against this affection are most numerous. One of them presents a certain interest, its basis being arsenic: "Arsenic, gr. 1.8, houangtan, gr. 3.6; pulverize, mix with water, and with a part of the mass form a small pill, which put close to the aching tooth, then sleep. Cure certain." With such an understanding of the etiology of toothache, therapeutics eventually could not have gone too far. (See also: Sabb. 67a; 111a; Yoma 84a; Ab. Z. 28a; Gittin 69a; Betz. 18b; Baba Kama 35a).

A silver tooth is permitted by all, whereas a golden one is permitted only by Rabbi and prohibited by the sages. The fact that gold and silver teeth were common in the days of the Talmud is indeed both pleasing and interesting to us. This leads us to the subject

of "Dental Prosthesis." The discovery of the art of prosthetic dentistry is attributed to the Egyptians. Artificial teeth artistically made and set have been found in mummies. In the Talmud the use of artificial teeth appears to have been more for cosmetic purposes, being listed among numerous articles of dress that were either prohibited or permitted to be worn by women on the Sabbath. The teeth referred to here are rendered in the text: שן תותבת שן של זהב There is considerable doubt as to the correct meaning of shen-tothebeth. It is translated above "a tooth of metal." This, however, appears to be incorrect. Being thus translated by M. L. Rodkinson). Shen-tothebeth was an artificial tooth taking the place (tothab—toshab) of a missing tooth and was not an expensive tooth. According to the commentators the tothebeth-tooth was either a natural tooth of man. an animal tooth, or a tooth made of wood (Nachmanides, Sabb. 64b). As to the golden tooth, the Rambam (Maimonides) expresses the opinion that they were golden shells placed by women upon bad-looking teeth, being anxious to conceal their deficiency. The manner in which the artificial teeth were fastened is unknown. Presumably they were attached to the adjoining teeth by means of rings. It seems certain, however, that they were not too well

fastened, having been feared that the woman will remove them to show them to her friends. It leads to the supposition that the mechanical construction of these teeth was some kind of a removable bridge work. (See also: Nedarim 66b).

SABB. 67a.—(*Mishna*). It is permitted to go out with eggs of grasshoppers or with the tooth of a fox or a nail from the gallows where a man was hanged, as medical remedies.

(*Gemara*). The eggs of grasshoppers as a remedy for toothache; the tooth of a fox as a remedy for sleep; viz., the tooth of a live fox to prevent sleep and of a dead one to cause sleep; the nail from the gallows where a man was hanged, as a remedy for swelling.

Note.—These are typical examples of folk-medicine. The articles mentioned, like all talismans, were supposed to work wonders. The selection made is a most peculiar one, and neither of the articles is perhaps ever obtainable.

SABB. 81b.—R. Eliezer said: One may take a splinter from the wood lying near him to clean his teeth with; but the sages say: He can take it only from a manger.

Note.—The splinter referred to is an ordinary "toothpick." The gemara discusses it more broadly in Betzah 33a, b.

SABB. 90a.—(*Mishna*). The prescribed quantity for pepper is the least possible amount.

(*Gemara*). To what can such a small quantity of pepper be put? It may be used by one whose breath is foul.

Note.—See: Sabbath 65a.

SABB. 110a.—"It is permitted to partake of all usual eatables." What does the Mishna mean to add by the word "all"?—A milt, which is good for the teeth (although it is bad for a weak stomach), and bran, which is good for the stomach (but bad for the teeth).

Note.—See: Berachoth 44b.

SABB. 111a.—(*Mishna*). One who suffers with toothache must not gargle vinegar for it, but he may dip something in vinegar and apply it, and if the pain is relieved thereby, he need have no fear of the consequences.

(*Gemara*). R. Asha bar Papa asked R. Abuha concerning the following contradiction:

"The Mishna teaches, that one who has a toothache must not gargle vinegar, implying thereby, that vinegar is a remedy for toothache, and still we find in the passage (Prov. x. 26): As vinegar is to the teeth, and as smoke is to the eyes, so is the sluggard to those that send him."—This presents no difficulty. The Mishna refers to an injured tooth, whereas the passage refers to sound teeth which are put on edge by vinegar.

Note.—Hippocrates in his book, "On the Use of Liquids," recommends vinegar in cases of "burning of the teeth." Aristotle in his "History of Animals" says: "The setting on edge of the teeth may be produced not only by eating acid things, but also simply by seeing them eaten. This sensation may be made to cease by the use of purslane and salt."

SABB. 133a.—One may perform anything necessary for circumcision on the Sabbath, as circumcising, tearing open, sucking out the blood, applying a plaster or a caraway seed. If the latter had not been ground before the Sabbath, one may masticate it with the teeth and then apply it.

Note.—To triturate medicinal substances a mortar and pestle is generally used. The teeth serve this purpose for food, hence why not occasionally for a caraway seed? (See end of "Note" to Gittin 69a).

SABB. 152a.— 'And the grinders will stand still' (Ecc. xii. 3)—by these are meant the teeth.

Caesar asked R. Joshua ben Hananiah: "Why didst thou not come to the debating rooms?" and he answered: "The mountain is covered with snow, the surrounding paths are icy, the dogs do not bark any more, and the "millstones" grind no more."

Note.—Rashi says: "The snow covered mountain, meaning his head was gray; the icy paths—his beard was gray; the dogs bark no more—his voice was inaudible; the millstones grind no more—his teeth were lost.

The physiologic function of the teeth has not yet been spoken of. The above extracts touch the subject to the extent that it compares the teeth to millstones, serving to grind or triturate the food. As a matter of fact there is little else to be attributed to the teeth, excepting their power of mastication. This function of the teeth is again mentioned in Niddah 65a: "Once a man loses his teeth,

his nutrition is diminished." R. Mair advises (see the extract following): "Be heedful of thy teeth and thou wilt show it in thy step." Rashi comments on this: eat well (and thou wilt look well). (See: **Baba Metziah 42b**).

SABB. 152a.—We have learned in the name of R. Mair: "Be heedful of thy teeth and thou wilt show it in thy step."דוק בכבי ותשכח בנינרי

Note.—R. Mair has thereby given us a well-formed proverb. He also has the credit of being the author of three hundred fox-fables based on proverbs (See: **Sanhedrin 39a**). Another Talmudic proverb is the following (**Chullin 127a**): "Count your teeth when you are kissed by a Narashite," (hinting that a man of Narash was not trusty). Among the Biblical proverbs are the following: "As vinegar is to the teeth, and as smoke is to the eyes so is the sluggard to those that send him." (Prov. x. 26).—"Like a carious tooth, and a foot out of joint, is confidence in a treacherous man in a time of distress." (Prov. xxv. 19).—"There is a generation, whose teeth are like swords, and whose cutting-teeth are as knives, to devour the poor from off the earth, and the needy from among men." (Prov. xxx. 14). A number of proverbs are common in the Yiddish language; more numerous are idiomatic expressions: **A kalle**

tzohn is a soineh in moil; a carious tooth is an enemy in the mouth.—A tzohn far a tzhon; a tooth for a tooth (a Biblical phrase, Ex. xxi. 24).—Leigen di tzeihn olf der politze; to lay the teeth on the shelf, i, e., not to have what to eat.—Leigen di tzeihn in a baitel (bag); a variation of the preceding.—Di tzeihn senen ihm far shrek shiur nit aroisgefalen; his teeth nearly fell out for fear.—Warfen a tzohn on a tzohn; throw a tooth against a tooth (in shivering or trembling).—Shtziren mit di tzeihn; gnash with the teeth.—Nit tzu wisen tzi fun tzeihn tzi fun bein; not to have the least notion of anything.—Shraien olf di tzeihn; cry on the teeth, i. e., cry in vain.—Farreden di tzeihn; turn off one's attention in speaking.—Zain genug nor olf ein tzohn; suffice for but one tooth, i. e., a scarce meal.

PESACHIM 113a.— Rab said to his son Hyyah: "Do not make a habit of taking medicine. Do not make long strides. Avoid having a tooth extracted. Never try to tease a snake, and do not make sport of a Persian."

Not.—Rab was a practical physician. His warning to his son to avoid having a tooth extracted was a practical advice. The tooth in question is perhaps a molar tooth, being

rendered in the text through kakka. (See "note" to Ber. 56a). R. Hananel adds: "If an eye-tooth hurts you, do not have it extracted, because of the eye." Extraction in general must have been a dreadful thing in those days. This is evident from the description of the forceps then employed (usually of lead, easily bending), and from their unskillful manipulation. The extraction of a tooth was simply a torturous operation. A historian describes it thus: "The patient was seated on the floor, and his head, to insure its not moving, was placed between the knees of the operator. The forceps were inserted, the tooth having first been isolated and filled about with anything to insure against fracture, then with repeated there-and-back movements the tooth was finally jolted from its position." From this we can readily understand the reason for the "antipathy" existing against the extraction of a tooth. It might be mentioned, however, that so-called painless extraction could have been possible, anesthesia having been known to the Talmud. Surgery in general was quite advanced in the Talmud. Operations were known in dislocations of the thigh bone, contusions of the skull, perforations of the lungs, oesophagus, stomach, large and small intestines, and imperforate anus.

The warning against the extraction of a tooth is even now common in the case of a pregnant woman. There is a wide-spread belief that if a woman have a tooth extracted during pregnancy, there will be recurrence of toothache during every future pregnancy. This eventually will necessitate the extraction of a tooth each time she is pregnant. The fear against this leads to many a woman suffering intense pain, rather than submit herself to have the troublesome tooth extracted.

The shedding of a milk-tooth, or the extraction of a tooth in children, is especially interesting owing to quite an effective ceremony connected with it. It is greatly amusing to children and brings many a childish fancy. On the loss of a tooth, the child is directed to bring the tooth to the oven and say the following three times: **"Maizele, maizele, na-dir an alten (or beinernem) tzohn, gib mir a naiem (or eizernem) tzohn"** (little mouse, little mouse, here is an old tooth, give me a new tooth); then throw the tooth into the fire. Children are not always in sympathy with a little mouse; but its having dominion over the "new teeth" has perhaps many a time saved it from being scared back to its hole.

YOMA 84a.—R. Yochanan had the scurvy. He went to a matron of Rome. She did something to relieve him on a Thursday and the eve of Sabbath. He asked her, "What shall I do on Sabbath?" She said, "You will not need to do anything." He said, "But if, notwithstanding, I should be obliged to do something?" She said, "Swear to me that you will not tell it to anyone, so I shall tell you." After this, when she had told him, he went and lectured it to everybody. But he had sworn not to tell? He had sworn, "To the God of Israel I will not reveal," but to the people of Israel he could. But this deception was a profanation of God's name? He told her immediately thereupon: "I had sworn not to say it to God, but to Israel I would." What was it that she told him? Said R. Aha the son of R. Ammi: "Water of leavened dough, olive oil, and salt." R. Yemar says: "Not the water, but leavened dough itself, olive oil, and salt." R. Ashi says: "Fat of the wing of a goose." Said Abayi: "I have used all these things and was not cured until an Arab merchant said: 'The stones of olive, one-third grown, should be taken and burned

in a new *mar,* and be applied to the rows of the teeth.' This I have done and have been cured." What causes such a sickness? Eating of hot barley-bread or the remains of a dish of *harsana* from the pervious evening. What are its symptoms? When something is put on the teeth they begin to bleed. R. Nachman ben Yitzchak said: Scurvy begins in the mouth and ends in the entrails."

Note.—Rashi says: "Scurvy (צפדינא) a sickness of the teeth and jaws beginning in the mouth and ending in the entrails; the sickness is a serious one. Harsana: fish fried in flour and the fish's own oil." At **Ab. Z. 28a**, Rashi renders **cephidna**, or as it is written there **cephdina**, with an old French term, **"mishga."** Rashi also translates hidrokan like **cephidna** צפידנא at **Erub.** 41b.

Aside from the etymological difficulties, the sickness referred to is one involving the teeth and gums, and is well described in the Talmud. We learn of **cephidna** or **cephdina**, its etiology, pathology, symptoms and therapeutics, the latter of which seems to be successful resulting in the cure of R. Abayi. **Cephidna** has been translated by many as scurvy (Aruch, Aruch completum, Levy, Jastrow). Buxtor translates it with putredo, attributing the disease to a putrescent condi-

tion of one or more teeth. From the pathology of the case we must assume that the disease has affected the entire oral cavity, and was undoubtedly a generalized inflammation of the mouth. To think it the result of putrescent teeth would mean some pre-existing alveolar abscess, a condition of which we find no mention, ending in a complication of the bowels. It seems more probable that the disease was rather a form of stomatitis. There are reasons to believe that the disease was not of mere local origin. We see, however, that the treatment was applied locally and has proved quite successful. This only proves to illustrate that local treatment can be possible even though there be constitutional disorders existing. Also scurvy, upon which the majority of writers are agreed, is a constitutional disease, and might be accepted in as far as bleeding of the gums is concerned.

Among the sufferers of the disease was also Rabbi, mentioned at Baba-Metziah 85a. Rabbi accepted for himself cephidna as an affliction for seven years, and "during all the years Rabbi was suffering from his illness, it never happened that the country was in need of rain."

At Abodah Zarah 28a, the story of R. Yochanan is repeated, with the addition to

the etiology of the case, that it is also caused by eating cold wheat-bread (excepting the hot barley-bread), and R. Nachman remarks that he was a sufferer of cephidna himself, thus strengthening his assertion that the disease begins in the mouth and ends in the entrails.

BETZAH 18b.—And we have learned: One who suffers with toothache must not gargle vinegar for it, but he may dip something in vinegar and apply it, and if the pain is relieved thereby, he need have no fear of the consequences.

Note.—This is a Mishna which has already been explained together with its Gemara at Sabbath 111a. There R. Asha explains vinegar to be good for carious teeth and bad for sound teeth. The Jerusalem Talmud therefore comments that "vinegar is good for what is bad and bad for what is good." (J. Sabb. xiv. 14c, 76).

Among substances injurious to the teeth, the Jerusalem Talmud also mentions the vapor of bath-houses (J. Ab. Z. iii. 42d. 59). R. Yehudah was relieved from a toothache by the laying on of the hand of the prophet Elijah (J. Keth. xii. 35a. 51. Gen. R. 33). This sort of cure which belongs under the heading

of Psychic Medicine, though somewhat singular in character, is yet an important factor in therapeutics, and includes the so-called "royal touch," as well as hypnotism, music suggestion, faith cure, and Christian Science. While the laying-on of hands and the royal touch might have worked more effectively in the days of the Talmud, yet there are reasons to believe that any kind of suggestion that can possibly be practiced to-day will give equally wonder-working results and will prove equally beneficial. To the dentist the practice of mental suggestion in whatever form will always prove the most effective means for relieving many kinds of pains and for calming nervous patients, where the use of anodynes, counter- irritants and nerve sedatives would generally fail. Many a patient has come to the dentist with a throbbing toothache and has lost it the moment he seated himself upon the operating chair.

BETZ. 33a, b.—(*Mishna*). R. Eliezer says: One may take a splinter from the wood lying near him for the purpose of cleaning his teeth with.

(*Gemara*). R. Yehudah said: To take straw or other fodder of cattle, and break it for cleaning the teeth, is permitted. R. Kahana

objected him: If one breaks branches of spice-trees for the purpose of cleaning the teeth with them, he is liable to a sin offering. (It is permitted to break the branches of spice-trees for the purpose of enjoying their odor, but only when they are soft. To clean the teeth with them they must necessarily be hard, when it is prohibited to break them). R. Eliezer said: One may take a splinter from the wood lying near him to clean his teeth with; but the sages say: He can take it only from a manger. All agree that he shall not break it off, and if he does so, to clean the teeth or to open the door with it, then if unintentionally on a Sabbath, he is liable to a sin offering, and if intentionally on a festival, he is liable to the punishment of stripes. So is the decree of R. Eliezer. The sages, however, say: In both cases he is free, because this is only a *shbuth* (Sabbath-rest, rabinically).

Note.—We have already found the splinter or toothpick at Sabbath 81b. The toothpick (or קיסם) is again referred to at Baba Bathra 15b: He said, "Take out the splinter from thy teeth;" they answered, "Take out

the beam from thy eyes." Probably the splinter between the teeth was kept there as a means for straightening irregular teeth, or for some similar orthodontic purpose. (See also Arak. 16b). Another form of toothpick is mentioned at Chullin 16b, where it is prohibited to pick the teeth with a broken piece of pipe.

MEGGILLAH 15b.—You find it also with reference to the teeth of the wicked, as it is written: "The teeth of the wicked dost thou break" (Ps. iii. 8), and Resh Lakish said: Do not read "break" (*shibarta*), but "distend" (*shirbabta*). See BERACHOTH 54b; also SUTA 12b).

CHAGGIGAH 22b.—His teeth became black because of his fastings. (See also: NAZIR 52b).

Note.—It is rather difficult to account for the blackening of the teeth through fasting. Undoubtedly these were lifeless teeth in a gangrenous condition. The Jerusalem Talmud similarly tells us that "through continued fasting the teeth become black." (J. Sabb. v. 7c, 30). The commentators tell us also of red teeth (Rambam, Hilchoth Sabb. 19, 7; Rambam, to Sabb. 64b), which might have been

the cause of some hemorrhage of the teeth, thus coloring them red. Besides the black and red teeth, exceptional large teeth were also known to the Talmud. Such was the case with R. Jehudah who, on account of his extraordinary large teeth, received the nickname Shinnana (שִׁנָּנָא) Sometime the name Yehudah is entirely dropped and only Shinnana appears. (See: Ber. 36a; Sabb. 152a; Erub. 54a; R. H. 24b; Keth. 12b, 14a, 53a; Gitt. 78b; Kidd. 32a; B. K. 14a, 15b, 36b; B. B. 133b; Sanh. 84b; Nidd. 25b. Also Chag. 15b; Ker. 19b; Nidd. 13a, 17a).

KETHUBOTH 59b.—According to Beth-Shammai: He put a finger between her teeth. According to Beth-Hillel: She put a finger between her teeth.

Note.—These are idiomatic expressions, such as: To put a finger into the mouth, i. e., to hint at something.

KETH. 60a.—As we have learned: When one bites into anything and blood appears on the bite, one shall break the blood-portion off and eat the rest. But when there is bleeding between the teeth, one may suck the blood into the mouth without any harm.

Note.—This clearly illustrates that eating of blood is strictly prohibited; not even one's own blood after it appears on a morsal of food. When there is hemorrhage between the teeth, the loss of blood might prove fatal to the individual, therefore it is permitted to return the blood into the system. Has this passage ever been referred to in the ritual murder accusations, in the attempt to prove that eating of blood is permitted according to the Talmud?

KETH. 71a.—In the opinion of Rabi Mair, he put a finger between her teeth. Again we have learned: A woman who vows to be separated, and her husband hears it and does not object, then Rabi Mair and Rabi Yehudah say, she put a finger between her teeth.—Rabi Yosi and Rabi Eliezer say, he put a finger between her teeth. (See KETH. 59b.).

KETH. 111b.—We learn: "His teeth shall be white from milk" (Gen. xlix. 12. לבן שנים מחלב). Do not read לבן שיניים (white teeth), but לבן שנים ("old age" or "a child of two years"). R. Yochanan said, "Better make white the teeth of thy comrade, than give him

to drink milk; as it is written לבן שנים מחלב do not read לבן שינים but שינון לבון (make white the teeth).

NEDARIM 50b.—She described: "He is short, has a big abdomen, a dark complexion, and large teeth."

NEDARIM 66b.—She had a *tothebeth*-tooth and R. Ishmael made her a golden tooth.

Note.—The tothebeth-tooth was fully explained at Sabbath 64b. It is evident here that the tothebeth-tooth was an inexpensive tooth, and not a very good looking tooth. The golden tooth was a more becoming one, hence the change.

NAZIR 52b.—We have learned: His teeth became black on account of his fastings. (See: CHAGG. 22b).

SUTA 12b—You find it also with reference to the wicked, as it is written (Ps. iii. 8): "The teeth of the wicked dost thou break," and Resh Lakish said: Do not read "break" (*shibarta*), but "distend". (*shirbabta*).

Note.—For explanations, see: Ber. 54b; also Meg. 15b.

GITTIN 42b.—Come and hear: If he struck out one of his (the servant's) teeth and blinded one of his eyes, then he is free because of his tooth and he must pay him damages for his eye.

Note.—The Gemara here refers to the passage in the Bible: "And if he strike out his man-servant's tooth, or his maid-servant's tooth, he shall let him go free for the sake of his tooth." (Ex. xxi. 27). The matter is further discussed at Kiddushin 24a, 42b; Baba Kama 26b, 34b, 73b.

GITTIN 69a—For tooth(ache), said Rabba ben R. Hona, take a single clove of garlic, rub it with oil and salt, and place it on the thumb-nail of the aching side. It should, however, be circumscribed with a rim of dough, and care should be taken that it touch not the skin, because there is danger of leprosy. For the palate (affections of), R. Yochanan said, take bertram, which is as good as *mamru* (meaning is uncertain), and the roots of bertram are even better than *mamru*. To check (the spread of inflammation), take this into the mouth. To ripen (the abscess), take the bran remaining on the sieve, lentils together

with the dust and hops; from this about the size of a nut is taken into the mouth. To open (the abscess), white cresses should be blown in by someone through a wheat-stalk. To heal, earth should be taken from near a privy, kneaded with honey, and eaten; this proves effective.

Note.—It is rather difficult to understand the relationship between the thumb-nail of the aching side and the aching tooth, the connection evidently being a very close one, since the application of the substance to the thumb-nail would effect a cure of the tooth-ache. The Chinese similarly applied their remedies at some distant point. For tooth-ache the Chinese used garlic and salpetre, which they pulverized and made into pills. If the pains were on the left side, a pill was put into the right ear, and vice versa. A certain powder was given to be snuffed up into the left nostril if the person suffering from toothache was a man; into the right if a woman. Another complicated medicated powder was to be smelt with the right nostril or with the left, corresponding to the side on which the pain was located. Still another remedy was to roast a bit of garlic, crush it with the teeth, and afterward mix it with chopped horseradish seeds, reducing the

whole to a paste with human milk; they were then formed into pills; these were introduced into the nose on the side opposed to that where the pain was situated. **(Darby, "La medecine chez les Chinois").**

KIDDUSHIN 24a, b.—We have learned: He goes free because of his eye (which has been blinded by his master), or because of any other visible organ whose functions will not return. This is evident from the tooth and eye: Just as the (missing) tooth and eye are visible injuries, and they do not return, so also is every other visible injury, whereby (the organ) does not return. It seems, therefore, that the tooth and eye represent two teachings in one, (as if only one law were twice repeated), and wherever there are two teachings in one, then is there not something to infer from this? —Both are necessary. Had the merciful have written "tooth" alone, then we might think that it includes even a milk-tooth (which is later replaced), therefore he also wrote "eye." And had the merciful have written "eye" alone, then we might think that just as the eye which had been created with him, so also every other organ that had been created

with him; however, not the tooth (which makes its appearance after birth). Therefore both are necessary.

The Rabbanan have learned: If he has struck his servant on the eye and has weakened it, on a tooth and has loosened it, if he can yet make use of them, the servant does not go free because of them, but if he can not make use of them, the servant does go free because of them. We have learned elsewhere: When the eye of the servant was weak and he has blinded it, when the tooth was loose and he struck it out, if he has previously made use of them, the servant goes free because of them, but if not, the servant does not go free because of them.

Note.—Particular attention is paid in the Talmud to the teeth with their bearings to Jurisprudence. The basis of the Talmudical discussions, of course, is the Bible.—"Eye for eye, tooth for tooth, hand for hand, foot for foot" (Ex. xxi. 24). As we have seen, the Talmud explains the eye and tooth as representative examples of groups of organs. The master is liable for injuries to all organs; both those whose functions will return and those which are created with man or make

their appearance later. But the hand and foot are also mentioned, and the explanation of the Talmud that each is representative of a definite group of organs is not very applicable in these cases. It seems more probable that the tooth and eye (as also the hand and foot) were mentioned simply as organs most likely to be injured.

I find a most interesting comment on these biblical clauses in the works of Philo-Judeus (born 15 B. C. E.), who considers the striking out of a tooth as plotting against one's life:

"The law also commands that if any one strike out the tooth of a slave he shall bestow his freedom on the slave. Why is this? Because life is a thing of great value, and because nature has made the teeth the instruments of life, as being those by which the food is eaten. And of the teeth some are fitted for eating meat and all other eatable food, and on that account are called incisors, or cutting-teeth; others are called molar teeth from their still further grinding and smoothing what has been cut by the incisors, on which account the Creator and Father of the universe, who is not accustomed to make anything which is not appointed for some particular use, did not do with the teeth as

He did with every other part of the body, and make them at once, at the first creation of the man, considering that as while an infant he was only intended to be fed upon milk they would be a superfluous burden in his way, and would be a severe injury to the breasts, filled as they are at that time with springs of milk, from which moist food is derived, as they would in that case be bitten by the child while sucking the milk. Therefore, having waited for a suitable season, (and that is when the child is weaned) He then causes the infant to put forth the teeth which He had prepared for it before, and the most perfect food now supplied to it requires the organs above-mentioned now that the child rejects the food of milk."

"If, therefore, any one, yielding to an insolant disposition, strikes out the tooth of his servant, that organ which is the minister and provider of those most necessary things, food and life, he shall emancipate him whom he has injured, because by the evil which he inflicted on him, he has deprived him of the use and service of his tooth."

"Is then," some one will say, "a tooth of equal value with an eye?" "Each," I would reply, "is of equal value for the purposes for which they are given, the eye with reference

to the objects of sight, the teeth with reference to those that are eatable." But if any one were to desire to institute a comparison, he would find that the eye is entitled to the highest respects among all the parts of the body, inasmuch as being occupied in the contemplation of the most glorious thing in the whole world, namely the heaven; and that the tooth is useful in being the masticator of food, which is the most useful thing contributing to life. And he who strikes out a man's eye does not hinder him from living, but a most miserable death awaits the man who has all his teeth knocked out."

"And if any one meditates inflicting injury in these parts on his servants, let him know that he is causing them an artificial famine in the midst of plenty and abudance; for what advantage is it to a man that there should be an abundance of food, if the instruments by which he may be enabled to make use of it are taken from him and lost, through the agency of his cruel, and pitiless, and inhumane master? It is for this reason that in another passage the lawgiver forbids creditors to exact from their debtors a molar tooth or a grinder as a pledge, (Deut. xxix, 6.) giving as a reason that a person who does so is taking a man's life in pledge; for he who

deprives a man of the instruments of living is proceeding towards murder, entertaining the idea of plotting even against life.' (Works of Philo-Judeus, translated by C. D. Yonge, vol. iii. p. 352).

The conclusion to which Philo-Judeus arrives here is quite peculiar inasmuch as he strives to justify the law and the great value attributed to a tooth in the Bible. But how much less would he have said had he known with what astonishing facility the loss of a tooth can be remedied—the replacement of an artificial one of almost equal value! With our present knowledge of the teeth, the dental expert would have to consider a number of things before giving his final decision as to the degree of liability when a man's tooth was knocked out. He would have to consider the texture of the tooth, whether it was of soft or hard texture, whether it was a loose or a firm tooth, and whether little or great force was used in its displacement. Again, whether it was an anterior or a posterior tooth, whether a deciduous or a permanent tooth, and finally whether and how an artificial replacement is possible.

KIDD. 24b.—The Rabbanan have learned: When the master is a physician and the slave implores him to treat his eye and he blinds it,

to drill his tooth and he breaks it out, then he has tricked his master and goes out free. (See: B. K. 26b).

KIDD. 25a.—Rabbin related in the name of R. Ada as in the name of R. Yitzchak, that a maid of the house of Rabbi, who once came out of the dip-bath, found a bone between her teeth, and Rabbi therefore made it necessary for her to dip herself once more.

Note.—The dip-bath (מִקְוֶה) is taken by religious Jewish women after menstruation.

BABA KAMA 13b, 14a.—Said R. Hisda in the name of Abimi: In a partnership court one partner is liable to the other partner for damages done by the tooth and the foot.—Also R. Joseph taught: In a partnership court and an inn, one is liable for damages done by the tooth and the foot.—R. Eliezer, however, makes them free and explains the *mishna* that there is no liability for foot and tooth when it belongs to the plaintiff or to both the plaintiff and the defendant.

Note.—Baba Kama is the first tract of the "Seder Nezikin," (damages, jurisprudence). The subject of jurisprudence has already been discussed in the note under the extract of Kiddushin 24a, b, relative to the loss of the tooth and eye. Under the section Nezikin are listed the tracts Baba Kama, Baba Metziah, Baba Bathra, and Sanhedrin.

B. K. 16a.—(*Mishna*). There are five cases which are considered vicious and five which are considered non-vicious.—The tooth (of an animal) is considered vicious.

(*Gemara*). Therefore said Rabhina: The *mishna* is not completed, and should read as follows: There are five cases which are considered non-vicious until they are declared to be vicious; the tooth and foot, however, are considered vicious from the very beginning, and this is called the vicious ox.

B. K. 16b.—When a lion seizes anything (on public ground) and eats it, then (the owner) is not liable, because it is his nature to seize things. It is then like the eating of fruits and herbs (by cattle). So is it with tooth-damages on public ground which need not be paid for.

B. K. 26b.—We have learned: When the master is a physician and (the slave) implores him to treat his eye, and he blinds it, or to drill his tooth, and he breaks it out, then he has tricked his master and goes out free. (See: Kidd. 24b).

B. K. 27b, 28a.—R. Kahana objected: Ben-bag-bag said, "Never enter the yard of your neighbor unpermitted to take what may belong to you (in case the latter refuses to return it to you) in order that you do not appear like a thief to him. *Better strike his teeth out,* and say to him: I take what belongs to me." The other replied: "Keep this to thyself; Ben-bag-bag is alone in his opinion and the Rabbanan dispute him. Rabhina explains: Under strike his teeth out it is to be understood, bring suit against him.

B. K. 34b.—(*Mishna*). If his ox blinded the eye of his slave or knocked out his tooth the owner is not liable (*i. e.*, the slave is not to be manumitted), but if he himself blinded the eye of his slave or knocked out his tooth, he is liable. (See: B. K. 73b).

B. K. 35a.—There was an ox that belonged to R. Papa who when he once suffered from toothache removed the cover from the beer-barrel and drank from the beer to be cured. (See: Sabb. 64b).

B. K. 73b.—If a man blinds the eye of his slave and thereafter strikes out one of his teeth, he shall manumit the slave for the sake of his eye, and pay him the value of his tooth. If it occurs *vice versa, i. e.,* if a man strikes out the tooth of his slave and thereafter blinds one of his eyes, he shall manumit him for the sake of his tooth, and pay him the value of the eye. He must do so because it is written, "for the sake of his eye," which does not mean for the sake of his eye *and* his tooth, and "for the sake of his tooth," which does not mean for the sake of his tooth *and* his eye.

B. K. 83a.—Once a woman went into a certain house to bake, and a dog, through barking at her, caused her to have a miscarriage. Said the landlord of the house: "Fear him not, I have deprived him of his teeth and claws." But the woman answered: "Throw

thy favors to the dogs, the child is already gone!" (See: SABB. 63b).

B. K. 92b.—The people used to say: "Sixty-fold pain does a tooth experience when it hears another (eating) and does not eat itself."

BABA METZIAH 42b.—There was a guardian of orphans who brought an ox for the orphans and transferred it to the shepard. The ox had no teeth and could not eat and finally died. (See: SABB. 152a).

B. METZ. 85a.—Said Rabbi: "I see that chastisements are favored." And he accepted for himself afflictions for thirteen years, six of them with cold chills and seven of them with *cephidna* (an oral disease—see Yoma 84a). And during all the years Rabbi was suffering from his illness, it never happened that the country was in need of rain.

B. METZ. 113b.—Samuel said: "To all sicknesses I know a remedy excepting the following three:—and if one takes his meal and

immediately goes to sleep without walking four ells (which causes offensive breath)." (See: SABB. 41a).

BABA BATHRA 15b.—R. Yochanan said: It is written (Ruth i. 1), "And it came to pass in the days when the judges judged," etc. It means, it was a generation that judged the judges. If, *e. g.*, the judge said to them: "Take out the splinter from thy teeth," they answered, "If thou wilt take the beam out of thy eyes, I will remove the splinter from my teeth." (See: SABB. 81b, BETZ. 33a, ARAK. 16b).

SANHEDRIN 39a.—From R. Mair's three hundred fox fables we have only three: (1) "The fathers have eaten sour grapes and the teeth of the children were set on edge" (Ezek. xviii. 2); (2) "Just balances, just weights" (Lev. xix. 36); (3) "The righteous is delivered out of distress and the wicked cometh in his stead" (Prov. xi. 8).

Note.—In the text nothing is mentioned what the fables were. Rashi, however, explains it thus: "The fox said to the wolf, If you would go in a Jewish yard on the eve of Sabbath to assist them in the preparation

of meals for Sabbath, they would invite you for their best meal on Sabbath day. And when the wolf was severly beaten while doing so, he wanted to kill the fox. He, however, told him: This was because your father, in assisting them to prepare their meal, consumed the best of it and ran away. And to his question, Should I be beaten because of my father? he answered: Yea, the fathers have eaten sour grapes and the teeth of the children are set on edge. However, if you will follow me I shall show you a place where you can eat to satiation. And he led him to a well in which two pails were pulled up and down by means of a rope attached to a beam. And the fox entered in one pail, which dropped down to the bottom. And to the question of the wolf, For what purpose did you enter the pail? he answered: I see here meat and cheese which will be sufficient for both of us. And he showed him the reflection of the moon on the water, which the wolf mistook for a round cheese. And asking the fox how he can get it, he was told to enter the other pail which was on top. And to the cry of the wolf, How can I come out? he answered: The righteous is delivered out of distress and the wicked cometh in his stead."

SANHEDRIN 39a.—An atheist said to Rabban Gamaliel: "It reads (Ps. cxlvii. 4), 'Who counteth the number of the stars,' etc. What perogative is this? I also can do this." R. Gamaliel answered him: "Can you tell me how many teeth are in your mouth?" And he put his hand in his mouth and began to count them. Rejoined R. Gamaliel: "You are not aware of the number of teeth in your mouth, and yet you claim to know how many stars there are in heaven."

Note.—It was not only the atheist who showed his ignorance on questions concerning the teeth, but even Aristotle in his "History of Animals" writes: "The teeth are not always equal in number in both jaws; the animals provided with horns have no teeth in the front of the upper jaw; this, however, is also to be observed in animals without horns, as for example in the camel; the molar teeth are never changed either in man or in any known animal; the pig never changes its teeth; the man has more teeth than the woman." Also Hippocrates in his second book on "Epidemics" tells us: "Long-lived individuals have a greater number of teeth," which is as much as to say that the having of a greater number of teeth is a sign of longevity.

ABODAH ZARAH.—R. Eliezer asked: "How is it with the jaw-teeth and the cutting-teeth; are they to be considered as an external wound, being that they are hard, or are they an internal wound, being located internally?" Abayye replied, "Come and hear: If one has a toothache he must not gargle vinegar for it (as a remedy on Sabbath); this only if it is an ordinary toothache, but if the pains are great, then it is permitted." "Perhaps the author also meant great pains?" "So come and hear: R. Yochanan had the scurvy." (Here follows the story of R. Yochanan's sickness which is fully described at YOMA 84a).

CHULLIN 16b.—R. Hisda said in the name of R. Yitzchak, others claim that it was learned in a *boraitha*, "Five things they say concerning a piece of metal pipe: You must not slaughter with it, you must not perform circumcision with it, you must not cut meat with it, you must not pick the teeth with it, and you must not clean yourself with it. (See: BETZAH 33a, b).

CHUL. 59a.—If an animal is ruminant, then it is certain that it has no upper cutting-teeth, and it is clean. "Is this a fast rule? A camel is ruminant, and has no upper cutting-teeth, and yet it is unclean?" "A camel has canine teeth." "The young camel neither has canine teeth? Again, the rabbit and the hare are ruminant and have no upper cutting-teeth, and yet they are unclean? And besides, is there anything spoken of the cutting-teeth in the laws? Indeed, he meant as follows: Every animal that has no upper cutting-teeth is surely ruminant, and has split hoofs, and is therefore clean." R. Hisda said: "When one walks through a desert and finds an animal with split hoofs, one should examine its mouth; if it has no upper cutting-teeth, than it is surely clean, otherwise it is surely unclean; but one must know that it is no camel." "But a camel has canine teeth?" "Indeed, but one must know that it is no young camel."

Note.—The above dispute concerns animals that are either prohibited or permitted (kosher) to be eaten by the Jewish people.

CHUL. 59b.—The King spoke to R. Jehoshua ben Chananya: "Your God is likened unto a lion, as it is written (Amos iii. 8), 'The lion hath roared, who will not fear? the Lord Eternal hath spoken, who will not prophesy?' Where is the greatness in this, a hunter can kill a lion?" The latter replied: "Not unto an ordinary lion is He likened, but unto the lion of Be-Ilay." The former spoke: "I would like that you show him to me." The latter replied: "You cannot see him." Here he uttered for mercy, and the king was carried away from his place. As he was four hundred *parasans* away, the lion burst out so great a roar that all bridges and walls of Rome fell into ruins, and as he was three hundred *parasans* away, he burst out a second roar, and it caused the teeth of all the people to fall out, and he himself fell from his throne to the earth. He spoke: "I implore thee to have him return to his hiding." Here he again uttered for mercy, and brought him back to his place. (See: SABB. 63b.)

CHUL. 127a.—R. Giddel said in the name of Rab: "You must count your teeth when you are kissed by a Narashite" (as he might have stolen some, since the people of Narash are very distrustful).

Note.—At Sabbath 64b we saw that artificial teeth were quite common in the days of the Talmud Undoubtedly it was the artificial teeth made of gold and silver that were feared would be stolen by a Narashite. This also points to the fact that the artificial teeth were not too well fastened, and if made in bridgework would be some form of a removable bridgework.

BECH. 44a.—A Hebrew priest whose teeth have fallen out becomes unfit for his office because of his bad looks.

GLOSSARY

AGADA. The part of the Talmud consisting of legends, tales, and proverbs, in contradistinction to the part known as *halachah* which comprises the Jewish laws and customs.

ARUCH. A Talmudical dictionary composed by Nathan ben Jehiel of Rome, and completed in 1101.

ARUCH COMPLETUM. Kohut's "Aruch ha-Shalem."

b. ben.

B. C. E. Before the common era.

BORAITHA. An Aramaic word designating a tradition, or collection of traditions, not incorporated in the Mishna.

C. E. Common era.

CHALDAIC. The Chaldaic or Babylonian language.

GEMARA. The second part of the Talmud containing commentaries to the first part the *mishna*.

MAIMONIDES. Moses b. Maimon (RaMBaM). One of the most celebrated of the Jewish rabbis. Born 1131 C. E. He was also physician to the sultan of Egypt. Among his works are, a commentary on the Mishna, an abridgment of the Talmud, and the Book of Precepts. Died 1204.

MASTER. Rab, rabbi, rabbin, or rabban.

MIDRASH. Exegetic works of the Scriptures.

MIDRASH RABBAH. A collective name for the midrashim of the five books of the Pentateuch and the five Rolls.

MISHNA. The first part, or text, of the Talmud. The second part, or the *gemara,* is a commentary on the mishna text.

NACHMANIDES. Moses ben Nachman (RaM BaN). A celebrated Spanish rabbi and physician, living in the century following the death of Maimonides. Born 1195, died 1270, C. E.

R. Abbreviation of rab, rabbi, rabbin, rabban, or rabbam. Titles of dignity given to Hebrew masters, doctors, and chiefs of classes.

RAB. Master, or one who excels in anything. The title is Babylonian, and is considered of greater dignity than rabbi which is Palestinian. There were several gradations before the dignity of Rab or Rabbi. The head of a school was called Hacham, or wise. He who aspired to the doctorship, had the name Bachur, or Elou; and he frequented the school of the Hacham. When further advanced he had the title of Chabar to the Rab, or master's companion, and when perfectly skilled in the knowledge of the law and traditions, he was called Rab or Rabbin, and Morenu, (our master).

RAB (Rabh). The popular name of R. Abba Areka, as called by his disciples.

RABBAN (Pl. RABBANAN). Master; one who excelled in the knowledge of the law. (The title Rabban is of greater dignity than Rab or Rabbi).

RABBI. Master. (Properly *my master.*) Rabi, as well as Rab, is also the popular name of R. Abba Areka.

RAMBAM. Abbreviated Hebrew name of Rabbi Moses ben Maimon (RaMBaM). See "Maimonides."

RAMBAN. Abbreviated name of Rabbi Moses ben Nachman (RaMBaN). See "Nachmanides."

RASHI. The Hebrew abbreviated name of Rabbi Shelomo Itzchaki (R SH I). One of the most popular of the Jewish rabbis. Born in France in 1040. His chief works are voluminous commentaries on the Bible and the Talmud. He died in 1105.

SAGES. The Hachamim, the wise.

TARGUM. A common name given to the Chaldaic paraphrases of the Bible. There is the Targum Onkelos and the Targum Yonah. The former is the paraphrase on the Pentateuch or the books of Moses, the latter on the Prophets.

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